

# userProfilePage

**Profile Page** This document aims to define the functionality and structure required to develop a user profile page in a web application, allowing users to view and manage their profile information.

**Overview** ■ The user profile page serves as a personalized space for users to view, edit, and manage their account information, preferences, and settings within the application.

**Components** ■ The user profile page will consist of the following components:

- UserProfileInfo Component** ■ Displays user-specific information such as: User's name, Email address, Profile picture/avatar, Additional user details (e.g., bio, contact information).
- UserProfileForm Component** ■ Enables users to edit and update their profile information. Contains input fields for modifying: User's name, Email address, Profile picture/avatar upload functionality, Additional editable user details.
- UserProfilePage Component** ■ Acts as the main container for UserProfileInfo and UserProfileForm components. Manages the display of user information and editing functionality. Fetches user data and handles data updates to reflect changes made by the user.

**Functionality:**

- **Display User Information** ■ Retrieves user data from the backend or local storage. Displays user information in the UserProfileInfo component upon page load.
- **Edit User Profile** ■ Enables users to edit their profile information through the UserProfileForm component. Implements client-side validation for updated data. Provides feedback on successful profile updates.
- **Upload Profile Picture** ■ Allows users to upload and update their profile picture or avatar. Implements validation for accepted image formats and size limitations. Updates the profile picture upon successful upload.
- **Error Handling** ■ Displays appropriate error messages for data update failures or invalid inputs. Logs client-side errors and server-side issues encountered during data update processes.

**Testing:** ■ Conduct unit tests for each component and functionality. Test different scenarios (valid data update, invalid inputs, server errors) to ensure the robustness of the profile editing process. Include tests for exceptional scenarios like network failures or backend unavailability.

**Future Enhancements:** ■ Implement password change functionality. Enhance profile customization options (e.g., theme settings, personalization). Integrate two-factor authentication settings within the profile.

**Conclusion:** ■ The user profile page is a crucial feature for user interaction within the application. Implementing seamless data retrieval, editing functionality, and error handling ensures a personalized and user-friendly experience.